USER MANUAL
2 IN 1 PROFESSIONAL LCD PROGRAM BOX

Thanks for purchasing the 2 IN 1 PROFESSIONAL PROGRAM BOX for ESC (Electronic Speed Controller). Please read this user manual throughly before using it.

【FEATURES AND FUNCTIONS】

The 2 IN 1 PROFESSIONAL PROGRAM BOX is a small device to set the programmable parameters of the brushless speed controllers; it works in the following 2 ways:

1. Working as an individual device to set the ESC, the option of each parameter is displayed on its own LCD screen;
2. Working as an USB adapter to link the ESC with a PC, and the user can update the firmware of the ESC or set the ESC by the special application software on PC.

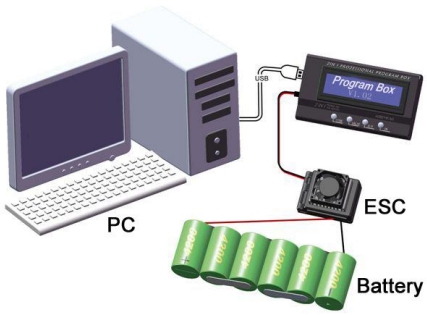
【SPECIFICATION】

1. Size: 91mm * 54mm * 18mm
2. Weight: 65g
3. Power supply: DC 4.5V to 6.0V

【WIRING SEQUENCE】

A) When you are using an ESC with a built-in BEC (Battery Elimination Circuit)

1. Disconnect the main battery pack from the ESC.
2. Disconnect the Rx cable of the ESC (trio wires) from your receiver, then plug it into the port marked with ⊖⊕V (This port is at the left side of the program box).
3. Connect the main battery pack to the ESC.
4. Wait for several seconds, the LCD will show the following message if the connection is successfully established.




```
Mode 0
 mode0_car0
```

After that, the user interface for the 1st programmable item will be shown on the LCD. For example, if the program box is connected with a Car ESC, the screen will be:

```
Runnin9 Mode
*  For/Rev/Brake
```

If the connection is failed, then the program box will try to reconnect the ESC continually, and the LCD shows this message:

```
Connectin9 ESC
```

If the firmware of the program box is not the latest version, perhaps the program box cannot identify the ESC, in such a case, the LCD shows:

```
Please Up9rade
Firmware
```

In such a case, please upgrade the program box.

***Note1:* THE SEQUENCE OF STEP #2 AND STEP #3 CANNOT BE REVERSED! Otherwise the program box cannot work properly.**

B) When you are using an ESC without a built-in BEC

If the ESC hasn't a built-in BEC, you must use an additional battery pack (4.5-6.0V) to supply the program box, and usually a receiver battery pack is a good choice.

1. Disconnect the main battery pack from the ESC.
2. Disconnect the Rx cable of the ESC (trio wires) from your receiver, then plug it into the port marked with ⊖⊕V (This port is at the left side of the program box).
3. Connect the additional battery pack (4.5-6.0V) to the program box (Plug it into the port marked with ⊖⊕)
4. Connect the main battery pack to the ESC.

***Note2:* THE SEQUENCE OF STEP #2, STEP #3 AND STEP #4 CANNOT BE REVERSED! Otherwise the program box cannot work properly.**

***Note3:* Don't use a battery pack higher than 6V to supply the program box!**

【OPERATION】

3 profiles for Car ESC or 1 profile for Aircraft/Helicopter ESC can be stored in the program box. Each profile contains different options of the programmable items, so user can easily select the most suitable profiles for different tracks.

The three profiles for Car ESC are named Mode0_car0, Mode1_car1, Mode2_car2 (Note: For some Car ESC, the profiles are named Profile0_car0，Profile1_car1，Profile2_car2). The profile for Aircraft/Helicopter ESC is named Profile0_esc0.

1. Working as an individual device to program the ESC

   "ITEM" Button: Change the programmable items circularly; Exit the customized option setting process.

   "VALUE" Button: Change the options of each programmable item circularly; Change the options of each customized parameter circularly; Change the profiles circularly.

   "R/P" Button: Enter or return to the profiles selection menu.

   "OK": Button: Save the options in the ESC; Enter the customized option setting process.

***Note4:* You must press the "OK" button to save the settings in the ESC.**

***Note5:* Some programmable items have customized options, if you press the "ITEM" button after setting the customized option; it is just saved in the program box, but not saved in the ESC. You must press the "OK" button to save it in the ESC.**

Note6: Please set the customized options in the following way:

1) Enter the user interface for a customized programmable item, for example, the interface for "Drag Brake Force" is

```
Dra9 Brake Force
   Custom: 20%
```

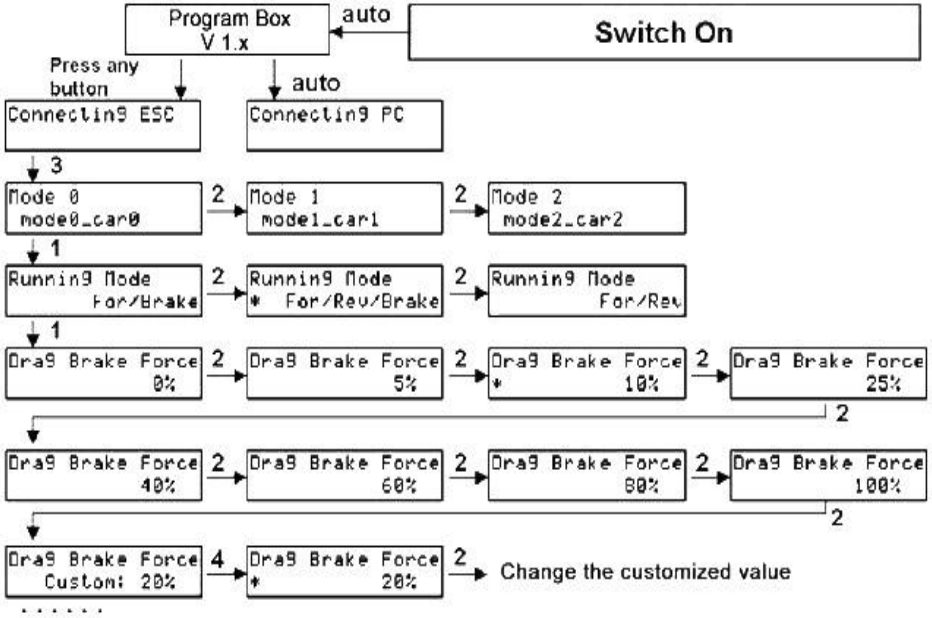
2) Press OK button to change to customizing status.
3) Press VALUE button to select the option.
4) Press OK button the save the settings in the program box and in the ESC.

2. Working as an USB adapter to link the ESC with a PC
   Please download the latest software and the user manual from the manufacturer's website.

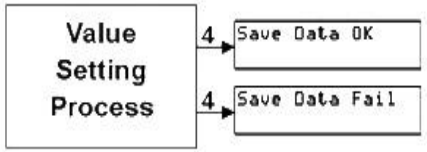
【EXAMPLE OF PROGRAMMING AN ESC】

In the following example, we use some characters to represent the different buttons.

- ► Auto = The next event will happen automatically
- ► 1 = Press the "ITEM" button, 2 = Press the "VALUE" button
- ► 3 = Press the "R/P" button, 4 = Press the "OK" button



For other programmable items, the setting processes are similar with the above steps.



【SPECIAL NOTE】

The firmware of the LCD program box and the related USB LINK SOFTWARE are updated frequently, please often check the websites to get the latest product information and the latest software package.

The detail information of the LCD Program Box:
http://www.hobbywing.com/product_show.asp?id=215

The detail information of the USB Link Software:
http://www.hobbywing.com/product_show.asp?id=218